ARCHEOLOGICAL AND HISTORIC RESOURCES SURVEY OF THE WEIDNER ROAD BRIDGE OVER BEITEL CREEK, SAN ANTONIO, BEXAR COUNTY, TEXAS

WBS Element: 40-00008-04-02 Env. Code: 10-553A3-174CIPI

by

Karl W. Kibler

and

Amy E. Dase

Principal Investigator: Karl W. Kibler

LETTER REPORT NO. 811

submitted to

Adams Environmental, Inc. San Antonio, Texas

by

Prewitt and Associates, Inc. Cultural Resources Services Austin, Texas

PAI No. 209023

September 2009

TEXAS ANTIQUITIES PERMIT NO. 5391

TABLE OF CONTENTS

ABSTRACT	iv
INTRODUCTION	1
ENVIRONMENTAL SETTING	2
METHODS AND RESULTS OF THE SURVEY	3
RECOMMENDATIONS	6
REFERENCES CITED	7

LIST OF FIGURES

1.	Project area map	1
2.	Electric power poles supporting electric lines and streetlights, facing south	4
3.	Concrete support and guardrail posts, facing northwest	4
4.	Bridge deck	5
5.	Box culvert bridge over Beitel Creek, looking east	5
6.	Box culvert bridge over Beitel Creek, looking northeast	5

ABSTRACT

In September 2009, Prewitt and Associates, Inc., conducted an archeological and historic resources survey of approximately 0.67 acres of existing bridge and road right of way along Weidner Road at Beitel Creek in San Antonio, Texas, for the proposed replacement of the existing bridge. The work was performed for the City of San Antonio and Adams Environmental, Inc., of San Antonio. No archeological sites were observed within the project area. The archeological resources project area is disturbed by buried utility lines and construction fill and has no potential for buried prehistoric sites or features that would yield significant information. One historic-age bridge was documented in the historic resources study area. The bridge is recommended as not eligible for the National Register of Historic Places or for listing as a State Archeological Landmark, since it is not an excellent representative of its type, bears no sufficient design or engineering complexity, and has no known local historical associations. The proposed project will have no effect on significant archeological or historical resources, and no further work is recommended.

CURATION

No artifacts needing curation were collected during the survey. Project records and photographs will be kept on file at Prewitt and Associates, Inc.

INTRODUCTION

In September 2009, Prewitt and Associates, Inc., conducted an archeological and historic resources survey of approximately 0.67 acres of existing bridge and road right of way along Weidner Road at Beitel Creek in the City of San Antonio for the proposed replacement of the existing bridge (Figure 1). The survey was authorized by the State of Texas Antiquities Code (Texas Natural Resource Code of 1977, Title 9, Chapter 191, VTCS 6145-9) and conducted under Texas Antiquities Permit No. 5391. The survey was conducted to identify, document, and evaluate archeological and historic resources to provide sufficient documentation for determining the presence of significant properties in compliance with the Texas Antiquities Code and Section 106 of the National Historic Preservation Act.

Figure 1. Project area map.

The project area is north of the Wurzbach Parkway and north and west of Interstate Highway 35. Bridge replacement impacts will consist of paving the southern and northern bridge approaches on Weidner Road and constructing a concrete box culvert in the Beitel Creek channel. This will impact an area approximately 205 m (675 ft) long and approximately 20 m (70 ft) at its widest point. The construction will permanently disturb 0.10 acres of the floodplain, though the depths of these impacts are currently not known. Paving the bridge approaches will permanently impact 0.57 acres. No new right of way or construction easements are needed or proposed for this project. For the archeological survey, the Area of Potential Effects is restricted to the footprint of

the bridge itself and the adjacent approaches, since these are the only areas that will be disturbed. Since the proposed bridge replacement is along an existing transportation corridor, the historic resources study area consists of the existing roadway and bridge and 150 ft beyond the existing right of way.

Field records for the survey were kept in a standard format and consist of the project notes, digital photographs, and photograph log. No artifacts were collected and therefore no materials require curation. All records produced from this project are on file at Prewitt and Associates, Inc.

ENVIRONMENTAL SETTING

Bexar County is in south-central Texas and straddles the Balcones Fault Zone, which separates the Edwards Plateau from the Blackland Prairie of the Gulf Coastal Plain to the southeast (Arbingast et al. 1973:6; Bureau of Economic Geology 1983). The Edwards Plateau margin has been heavily dissected by stream downcutting and headward erosion, resulting in a rugged landscape of limestone hills and canyons, whereas the Blackland Prairie is typically rolling tall grasslands underlain by soft limestones, marls, and chalks.

The climate of the Blackland Prairie region can be classified as modified humid subtropical with Gulf-influenced hot summers and continental-influenced mild winters; the Edwards Plateau region is subtropical steppe with low summer humidity (Natural Fibers Information Center 1987:10–12). Summer temperatures can exceed 100°F, and freezing temperatures can occur during the winter months, although such extremes are more frequent in the Edwards Plateau region. The mean annual precipitation for Bexar

County is 29.1 inches (739 mm). Rain falls throughout the year, with slight peaks in the late spring and early fall months (Natural Fibers Information Center 1987:49).

Like the landscape and climate, the biota of Bexar County differs from east to west, although there is geographical overlap of some species. The flora and fauna of the Edwards Plateau are defined as Balconian, while those of the Blackland Prairie are characterized as Texan (Blair 1950).

The project area traverses the Beitel Creek valley, which is incised in Upper Cretaceous Pecan Gap Formation (Bureau of Economic Geology 1983). Beitel Creek is a tributary of Salado Creek and part of the San Antonio River basin. The valley itself probably contains some Holocene alluvium but not enough to be mapped as a discrete unit on the 1:250,000-scale *Geologic Atlas of Texas–San Antonio Sheet*. Vertisols and Mollisols of the Trinity and Frio series are mapped on the floodplain of Beitel Creek, and Mollisols of the Austin series are mapped on the adjacent uplands (Taylor et al. 1991).

METHODS AND RESULTS OF THE SURVEY

Prior to field investigations, a search for previously recorded archeological sites within or near the project area was conducted using the Texas Historical Commission's Archeological Sites Atlas. Although no previously recorded archeological sites occur within the immediate project area, one site has been recorded nearby. Site 41BX950 is a large prehistoric lithic procurement site about 0.1 km south of the project area. No previously identified historic properties are in or near the historic resources study area.

Field investigations consisted of a 100 percent pedestrian survey and surface examination across the 0.67-acre project area. Surface visibility was poor due to

vegetation and paved road surfaces.

Construction-related impacts and other disturbances were observed throughout the project area. Concrete and asphalt rubble fill 2–3 m thick was observed on the surface and in creek bank exposures. A buried utility line is present along the outer margin of the existing right of way east of Weidner Road. Also east of the road, the channel of Beitel Creek has been modified with concrete embankments that extend beyond the right of way. Overhead electric power poles supporting electric lines and streetlights are on the west side of the right of way (Figure 2). Also on the west side are concrete supports for guardrail posts that are ca. 60 cm in diameter and more than 100 cm deep (Figure 3). Concrete-lined drainage ditches 5 m long and 2 m wide are present along three of the four bridge corners.

Figure 2. Electric power poles supporting electric lines and streetlights, facing south.

Figure 3. Concrete support and guardrail posts, facing northwest.

Due to the extensive nature of these disturbances. no shovel tests or trenches were excavated. No archeological sites were observed, and given the extensive impacts and disturbances, the surveyed area has no potential for buried prehistoric sites or features that would yield significant information.

A concrete box culvert bridge was identified in the study area (Figures 4–6). The bridge's construction date is not known, but it is likely to have been constructed before 1965. A series of concrete box culverts support the existing asphalt-paved concrete bridge deck. These culverts may be precast, but more likely were cast in place. The approaches

to the bridge consist of two travel lanes that extend across most of the existing right of way save for 2–3 m on either side. The travel lanes are built on fill sections, present at each end of the bridge, that are 2–3 m thick and extend away from the bridge 10–20 m.

Figure 4. Bridge deck. (a) Looking south; (b and c) looking north.

Figure 5. Box culvert bridge over Beitel Creek, looking east.

Figure 6. Box culvert bridge over Beitel Creek, looking northeast.

To be considered eligible for the National Register of Historic Places, a bridge should either be an excellent example of its type to be considered significant as a representative example, or it should exhibit exemplary design or engineering complexity to be considered significant as unusual or distinctive. A bridge may also be considered significant for its associations with community development, transportation, or prominent individuals.

Although this bridge retains its integrity of location, its integrity of setting has been compromised with the introduction of modern electric power poles supporting overhead electric lines and streetlights. Original concrete supports remain in place on the east side of the bridge, some of which are painted yellow, but the historic guardrail has been removed, and no replacement has been introduced. On the west side of the bridge, some original concrete supports remain intact, but others have been removed. On this side of the bridge, modern metal guardrails have been installed. The removal of

historic attributes and the introduction of modern materials infringe on the bridge's integrity of materials, design, workmanship, and feeling. Because of these infractions, the bridge is not an excellent example of its type. This is a very common bridge type and exhibits neither design nor engineering complexity. The bridge has no known historical associations and consequently lacks associative integrity. For these reasons, the bridge is recommended as not eligible for both the National Register of Historic Places and State Archeological Landmark designation.

RECOMMENDATIONS

The archeological and historic resources survey of 0.67 acres at the Weidner Road bridge at Beitel Creek consisted of 100 percent pedestrian survey. No archeological sites were observed or recorded. Because of impacts and disturbances related to the construction of the existing bridge, channel modifications, and utility lines, the archeological project area has no potential for intact buried prehistoric features or components and does not contain important information. One historic-age bridge identified in the study area is recommended as not eligible for the National Register of Historic Places or for listing as a State Archeological Landmark. Thus, construction of the proposed bridge and pavement of the existing travel lanes will have no effect on any significant archeological or historical resources. No further work is recommended.

REFERENCES CITED

Arbingast, Stanley A., Lorin G. Kennamer, Robert H. Ryan, Alice Lo, David L. Karney, Charles P. Zlatovich, Michael E. Bonine, and Roberta G. Steele

1973 Atlas of Texas. Bureau of Business Research, The University of Texas at Austin.

Blair, W. Frank

1950 The Biotic Provinces of Texas. The Texas Journal of Science 2(1):93–115.

Bureau of Economic Geology

1983 Geologic Atlas of Texas San Antonio Sheet. Bureau of Economic Geology, The University of Texas at Austin.

Natural Fibers Information Center

The Climates of Texas Counties. Bureau of Business Research, The University of Texas at Austin, in cooperation with the Office of the State Climatologist, Texas A&M University, College Station.

Taylor, F., R. B. Hailey, and D. L. Richmond

1991 Soil Survey for Bexar County, Texas. U.S. Department of Agriculture, Soil Conservation Service, in cooperation with Texas Agricultural Experiment Station.